REMARKS

Applicants respectfully request reconsideration of the present application in view of the above amendments and the following remarks. No new matter has been added to the present application. Claims 1-30 have been rejected in the Office Action. Applicants have amended independent claims 1, 22, 25, and 28 and have canceled dependent claim 11. Accordingly, claims 1-10 and 12-30 are pending herein. Claims 1-10 and 12 -30 are believed to be in condition for allowance and such favorable action is respectfully requested.

Applicants amended independent claims 1, 22, 25, and 28 to provide clarifying language to distinguish the claims from the cited references and to address the subject matter discussed during the telephonic interview of October 20, 2004 as likely being sufficient to place the claimed invention in condition for allowance. Although amending the "calculating a threshold level" limitation of claim 1 (and related limitations in the other independent claims) was discussed during the telephonic interview, the "identifying a maximum monitored level" limitation has been amended to provide clarifying language regarding the term "maximum monitored level" to distinguish the term (and claimed invention) from the cited references. Because the "calculating a threshold level" limitation is based on the "maximum monitored level," Applicants submit that the amendment clarifies the "calculating a threshold level" limitation as well. For the reasons stated below and during the telephonic interview, Applicants respectfully submit that claims 1-10 and 12-30 are patentable over the cited references.

Applicants submit that claims 1-10 and 12-30 are patentable over the prior art of record. The Office Action sets forth five different obviousness rejections. Claims

1-9, 14-27 and 29-30 stand rejected under § 103(a) over U.S. Patent No. 5,913,040 to Rakavy et al. ("Rakavy") in view of U.S. Patent No. 5,898,673 to Riggan et al. ("Riggan"). With respect to dependent claim 9, the rejection under § 103(a) also relies on Official Notice taken by the Examiner. Dependent claims 10 and 11 are rejected under § 103(a) over Rakavy in view of Riggan, and further in view of U.S. Patent No. 6,285,662 to Watanabe et al. ("Watanabe"). Dependent claim 12 stands rejected under § 103(a) over Rakavy in view of Riggan, and further in view of U.S. Patent No. 6,427,169 to Elzur et al. ("Elzur"). Dependent claim 13 is rejected under § 103(a) over Rakavy in view of Riggan, and further in view of U.S. Patent No. 6,078,591 to Kalkunte et al. ("Kalkunte"). Finally, independent claim 28 stands rejected under § 103(a) over U.S. Patent No. 6,463,468 to Buch et al. ("Buch") in view of Rakavy in view of Riggan. For the reasons stated below, Applicants traverse the foregoing rejections and respectfully submits that claims 1-10 and 12-30 are patentable over the prior art.

Addressing initially the rejection of claims 1-9, 14-27 and 29-30, independent claims 1, 22 and 25 are patentable over the combination of Rakavy and Riggan because each independent claim includes a limitation relating to a maximum monitored level of actual network bandwidth utilization and a limitation relating to the calculation of a threshold level of utilization as a function of the maximum monitored level of actual network bandwidth utilization. As explained below, these claim limitations are neither taught nor suggested by the proposed combination of Rakavy and Riggan.

Independent claim 1 requires monitoring the level of actual network bandwidth utilization, identifying a maximum monitored level of actual utilization, calculating a threshold level of utilization as a function of the maximum monitored level

of utilization, and, if the actual level is less than the threshold level, receiving at least a portion of the set of data over the network. On page 3, the Office Action admits that "Rakavy does not disclose identifying a maximum monitored level of actual utilization and that the threshold level of utilization is calculated as a function of the maximum monitored level of utilization." In addition, Applicants respectfully submit that: (1) Rakavy fails to teach or suggest calculating a threshold level of utilization as a function of the current monitored level of utilization; (2) Riggan fails to teach or suggest identifying a maximum monitored level of actual utilization; and (3) Riggan fails to teach or suggest calculating a threshold level of utilization as a function of the maximum monitored level of utilization.

First, it is respectfully submitted that Rakavy fails to teach or suggest calculating a threshold level of utilization as a function of the current monitored level of utilization. The Office Action indicates that Rakavy discloses calculating a threshold level of utilization as a function of the current monitored level of utilization, referring to column 13, line 66 to column 14, line 7. However, closer review of Rakavy indicates that it fails to teach or suggest that the threshold level is a function of a monitored level of actual bandwidth utilization. Rakavy discloses a threshold that "may be fixed, . . . user-configurable, or dynamic." (col. 13, lines 37-38). Although Rakavy indicates that the threshold may be dynamically determined, it fails to disclose that it may be dynamically determined as a function of a monitored level of actual bandwidth utilization. Instead, Rakavy discloses that "[w]hen dynamically determined, the threshold may vary with a number of parameters such as the length of time the TCP/IP Polite Agent 280 has been waiting to transmit, the number or type of Polite Agent Jobs 285 on the Polite Agent

Queue 286, the amount of data which the TCP/IP Polite Agent wishes to transfer, and the type of data being transferred." None of these examples for dynamically determining a threshold disclose using a monitored level of actual bandwidth utilization. Furthermore, Applicants could not find any disclosure by Rakavy indicating the threshold level may be calculated using a monitored level of utilization. Therefore, Applicants respectfully submit that Rakavy fails to teach or suggest calculating a threshold level of utilization as a function of the current monitored level of utilization as recited in claim 1.

Second, it is respectfully submitted that Riggan fails to teach or suggest identifying a maximum monitored level of actual utilization. The Office Action indicated that Riggan discloses identifying a maximum monitored level of actual utilization, referring to column 9, lines 20 to 25. However, a closer review of Riggan indicates that although it discloses identifying a maximum contracted bandwidth limit, it fails to teach or suggest identifying a maximum monitored level of actual bandwidth utilization. The portion of Riggan referenced by the Office Action provides: "The QoS threshold is preferably defined relative to the QoS bandwidth limit provided for in the traffic contracts between the ATM user and the network provider. The QoS threshold is preferably less than or equal to the QoS bandwidth limit, which may be defined in terms of an absolute bandwidth or an average bandwidth." (col. 9, lines 20-25). It is Applicants' understanding that the Examiner's view is that the QoS bandwidth limit (which may be defined in terms of an absolute bandwidth) is a maximum monitored level of bandwidth utilization. However, a review of Riggan indicates that the QoS bandwidth limit is a maximum contracted level and not a maximum monitored level. At column 4, lines 36 to 43, Riggan indicates that the disclosed system establishes "[a] quality of

service (QoS) traffic contract bandwidth limit and a corresponding QoS threshold . . . . [A] QoS traffic contract is an agreement between an ATM user and the network provider regarding the quality of service (QoS) the ATM user can expect under specified conditions. One parameter specified in the traffic contract is the amount of guaranteed bandwidth." Therefore, Riggan discloses identifying a maximum contracted bandwidth limit, which is different than Applicants' invention. A maximum contracted bandwidth limit is typically completely independent of the actual bandwidth utilization experienced by a network connection and may be set prior to any monitoring of the actual bandwidth utilization. In contrast, a maximum monitored level is directly dependent upon the actual bandwidth utilization of a network connection and may not be set until the actual bandwidth utilization has been monitored. A maximum contracted bandwidth limit, as disclosed by Riggan, is the highest level of network bandwidth utilization for which a particular quality of service is guaranteed, whereas a maximum monitored level is a maximum of the monitored level of actual network bandwidth utilization. Accordingly, Applicants respectfully submit that Riggan fails to teach or suggest identifying a maximum monitored level of actual bandwidth utilization.

Third, it is respectfully submitted that Riggan fails to teach or suggest calculating a threshold level of utilization as a function of the maximum monitored level of utilization. The Office Action indicates that Riggan discloses calculating a threshold level of utilization as a function of the maximum monitored level of utilization (absolute bandwidth), again referring to column 9, lines 20 to 25. As discussed above, however, Riggan discloses using a maximum contracted bandwidth utilization instead of a maximum monitored bandwidth utilization. Riggan specifically states that "[t]he QoS

threshold is preferably defined relative to the QoS bandwidth limit provided for in the traffic contracts." (col. 9, lines 20-22). Additionally, Riggan provides that the "quality of service threshold is less than or equal to, preferably somewhat lower, than a bandwidth limit defined in a quality of service traffic contract." (col. 2, lines 3-5). Thus, Riggan calculates a threshold level based on a contracted maximum level and not on a maximum monitored level of actual bandwidth utilization. Accordingly, Applicants respectfully submit that Riggan fails to teach or suggest calculating a threshold level based on a maximum monitored level.

Applicants amended claim 1 to provide further clarification that the "maximum monitored level" of bandwidth utilization identified and used to calculate the threshold level is a maximum of the monitored actual network bandwidth utilization. The claim amendment further clarifies the distinction between the claimed invention and the cited prior art. Thus, there is no teaching or suggestion in Rakavy or Riggan -- taken either individually or in combination -- to identify a maximum monitored level of actual utilization or to calculate a threshold level as a function of a maximum monitored level of utilization as required by claim 1. "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); *see also*, MPEP § 2143.03. Because Rakavy and Riggan, either alone or in combination, fail to teach or suggest all of the limitations of claim 1, *prima facie* obviousness has not been established. Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejection of claim1 is respectfully requested.

The Office Action rejected independent claims 22 and 25 for similar reasons as stated for claim 1. Amended independent claim 22, which is directed to a data

structure stored on a computer-readable medium, recites "a first data field containing data representing a maximum monitored level, wherein the maximum monitored level is a maximum of a monitored level of actual network bandwidth utilization," and a second data file which "is derived from said data field by calculating the threshold level as a function of the maximum monitored level." Likewise, amended independent claim 25 is directed to a computer-readable medium having computer-executable components including a bandwidth monitoring component which "identifies a maximum monitored level, wherein the maximum monitored level is a maximum of the monitored level of actual bandwidth utilization for the network connection," and "a threshold calculating component which calculates a threshold level of utilization as a function of the maximum monitored level of utilization identified by said bandwidth monitoring components." These two limitations in each of the independent claims 22 and 25 are similar to the "identifying a maximum monitored level" and "calculating a threshold level" limitations of claim 1. Thus, for at least the reasons stated above with respect to claim 1, Applicants respectfully submit that Rakavy and Riggan fails to teach or suggest all the limitations of independent claims 22 and 25, and thus, a *prima face* case of obviousness has not been established for these claims. Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejection of claims 22 and 25 is respectfully requested.

Dependent claims 2-10, 12-21, 23-24, 26-27, and 29-30 are likewise patentable over the combination of Rakavy and Riggan for at least the reasons stated above with respect to their respective base claims 1, 22 and 25. Although the rejections for dependent claims 9, 10, 12, and 13 are based on prior art references in addition to Rakavy and Riggan, the rejections rely upon Rakavy and Riggan for the "identifying a

maximum monitored level" and "calculating a threshold level" limitations. As discussed above, Rakavy and Riggan fail to teach or suggest these limitations. "If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *see also* MPEP § 2143.03. Thus, because claims 1, 22, and 25 are nonobvious over Rakavy and Riggan, Applicants respectfully submit that the dependents claims 2-10, 12-21, 23-24, 26-27, and 29-30 are likewise nonobvious. Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejection of claims 2-10, 12-21, 23-24, 26-27, and 29-30 is respectfully requested.

Finally, independent claim 28 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Buch in view of Rakavy in view of Riggan. Buch discloses a technique for free Internet access which involves a method for downloading video advertising files when a user is not actively using the bandwidth of the Internet connection. As shown in FIG. 11 and described at column 12, Buch's method determines the ad block size based on the available data rate and perhaps also based on system resources. If the Internet connection is being used (e.g., to download content or to send/receive email), the method checks the availability of the connection again later. However, if the Internet connection is not being used, a request is sent to the ad server for information such as the file name, the offset from the file start where the block should be downloaded, and the determined ad block size. As discussed below, Applicants respectfully submit that claim 28 is patentable over the proposed combination of Buch, Rakavy and Riggan.

Amended independent claim 28 recites: "the actual network bandwidth utilization is less than a threshold level below which data may be transferred over the

network without interfering with other network activity, wherein the threshold level is calculated as a function of a maximum monitored level, and wherein the maximum monitored level is a maximum of the monitored level of actual network bandwidth utilization." The Office Action admits at page 11 that "Buch does not disclose that the threshold level is calculated as a function of a maximum monitored level of actual network bandwidth utilization," and thus the Office Action relies on Rakavy in view of Riggan for the missing limitation. However, the missing limitation of claim 28 is similar to the corresponding language in independent claims 1, 22 and 25, so claim 28 is patentable over the combination of Rakavy and Riggan for at least the reasons discussed above with respect to claims 1, 22 and 25. Furthermore, while the Office Action purports to rely on Rakavy in view of Riggan for the missing limitation, page 3 of the Office Action admits that Rakavy also fails to disclose this same limitation. Consequently, Riggan is the sole basis in the Office Action for the missing limitation of claim 28. Applicants respectfully submit that Riggan does not disclose that the threshold level is calculated as a function of a maximum monitored level of actual network bandwidth utilization as recited in claim 28. Instead, Riggan discloses calculating a threshold level as a function of a maximum contracted level of network bandwidth.

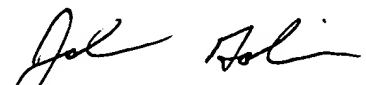
Thus, there is no teaching or suggestion in Buch, Rakavy or Riggan -- taken either individually or in combination -- to calculate a threshold level as a function of a maximum monitored level of utilization as required by claim 28. Therefore, the proposed combination of Buch, Rakavy and Riggan would not achieve the method of clam 28. Moreover, there is no suggestion from the prior art to modify the combined teachings of Buch, Rakavy and Riggan to achieve the method of claim 28. For at least the

reasons stated above, it is respectfully submitted that Buch, Rakavy, and Riggan fail to teach or suggest all of the limitations of claim 28, and thus, a prima facie case of obviousness has not been established for this claim. Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejection of claim 28 is respectfully requested.

CONCLUSION

For at least the reasons stated above, claims 1-10 and 12-30 are in condition for allowance. Applicants respectfully request withdrawal of the pending rejections and allowance of claims 1-10 and 12-30. If any issues remain which would prevent issuance of this application, the Examiner is urged to contact the undersigned prior to issuing a subsequent action. The Director is hereby authorized to charge any additional amount required, or credit any overpayment, to Deposit Account No. 19-2112.

Respectfully submitted,



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